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EXAMINER	
BRUCKART, BENJAMIN R	
ART UNIT	**PAPER NUMBER**
2155	

DATE MAILED: 02/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/941,680	SUZUKI ET AL.	
	Examiner	Art Unit	
	Benjamin R. Bruckart	2155	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 December 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-41, 43-100, 102-109* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-41,43-100 and 102-109* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Detailed Action

Claims 1-41, 43-100, 102-109 are pending in this Office Action.

Claims 43 and 101 remain cancelled.

Claims 1-3, 6, 11-13, 16, 25-26, 30, 34-37, 43-46, 50-58, 67-70, 73, 78-83, 92-96, 102-105, 109 are amended.

The 35 U.S.C. 112, second paragraph rejection is withdrawn in light of applicant's amendment and arguments.

Foreign Priority

Receipt is acknowledged of papers submitted on 12/08/05 under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file. Attention is directed to the fact that the date for which foreign priority is claimed is not the date of the filed application acknowledged in the oath or declaration. The priority date of 8/30/00 is given priority.

Specification

The changes to the specification and abstract are accepted.

Claim Objections

Claim 25 is objected to because of the following informalities: Claim 24, page 22, line 4 contains the word 'from' twice. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1-41, 43-100, 102-109 are rejected under 102(e) as being anticipated by U.S. Patent No. 6,141,507 by Sawada.

Regarding claim 1, a remote control system configured to control a plurality of apparatuses divided into a predetermined number of groups including at least an image forming apparatus (Sawada: col. 5, lines 5-22; claim 1), comprising:

a central control system comprising at least a computer unit configured to receive status information from said plurality of apparatuses and remotely control said plurality of apparatuses based on said status information (Sawada: col. 5, lines 5-22); and

an information collection unit configured to collect the status information from other image forming apparatuses included in a same group as said at least an image forming apparatus

(Sawada: col. 5, lines 5-22) when apparatus information of said at least an image forming apparatus is received by said central control system (Sawada: col. 3, lines 1-11).

Regarding claim 2, the remote control system according to claim 1, further comprising:

an information processing unit configured to process said status information which is acquired from said plurality of apparatuses and is collected by said information collection unit (Sawada: col. 5, lines 5-22); and

an information transmission unit configured to connect to terminal units provided by a plurality of service centers so as to control said plurality of image forming apparatuses and subsequently transmitting said information processed by said information processing unit (Sawada: col. 5, lines 23-39).

Regarding claim 3, the remote control system according to claim 1, further comprising:

an information setting unit configured to set said apparatus information in advance of collecting said status information, for which said collection by said information collection unit is allowed (Sawada: col. 4, lines 33-36).

Regarding claim 4, the remote control system according to claim 1, wherein said information collected, from all of said plurality of apparatuses to be remotely controlled, by said information collection unit is related to pre-maintenance (Sawada: col. 4, lines 30-48).

Regarding claim 5, the remote control system according to claim 1, wherein said information collected, from all of said plurality of apparatuses to be remotely controlled, by said information collection unit is related to expendable supplies and material (Sawada: col. 4, lines 30-45).

Regarding claim 6, the remote control system according to claim 1, further comprising:

a group setting unit configured to set a group in advance of collecting said status information by dividing said plurality of image forming apparatuses into said predetermined number of groups (Sawada: col. 16, lines 34-40).

Regarding claim 7, the remote control system according to claim 2, further comprising: an information alteration and addition unit configured to perform alteration and addition onto said information processed by said information processing unit (Sawada: col. 5, lines 28-45; col. 6, lines 42-55).

Regarding claim 8, the remote control system according to claim 2, further comprising: an information destination setting unit configured to set a destination of information transmission performed by said information transmission unit (Sawada: col. 15, lines 58-64; col. 5, lines 33-39).

Regarding claim 9, the remote control system according to claim 2, further comprising: an information outputting unit configured to output said information processed by said information processing unit through at least one of an image formation on a display device, data recording on a paper sheet, or an audible voice (Sawada: col. 5, lines 15-26).

Regarding claim 10, the remote control system according to claim 2, further comprising: an information transmitting unit configured to transmit said information processed by said information processing unit when a request for acquiring said processed information is received from any terminal unit of the terminal units (Sawada: col. 5, lines 33-39).

Regarding claim 11, a remote control system configured to control a plurality of apparatuses divided into a predetermined number of groups including at least an image forming apparatus (Sawada: col. 5, lines 5-22; claim 1), comprising:

a central control system comprising at least a computer unit configured to receive status information from said plurality of apparatuses and remotely control said plurality of apparatuses based on said status information of at least an image forming apparatus (Sawada: col. 5, lines 5-22);

an information accumulation unit configured to accumulate apparatus information when said apparatus information is received by said central control system from said at least an image

forming apparatus of said plurality of apparatuses to be remotely controlled (Sawada: col. 5, lines 5-22); and

an information retrieval unit configured to retrieve the status information from other image forming apparatuses included in a same group as said at least an image forming apparatus (Sawada: col. 5, lines 5-22) when said apparatus information of said at least an image forming apparatus is received by said central control system (Sawada: col. 3, lines 1-11).

Regarding claim 12, the remote control system according to claim 11, further comprising:

an information processing unit configured to process said status information which is acquired from said plurality of apparatuses and is retrieved by said information retrieval unit (Sawada: col. 5, lines 5-22); and

an information transmission unit configured to connect to terminal units provided by a plurality of service centers so as to control said plurality of image forming apparatuses, and subsequently transmitting said information processed by said information processing unit (Sawada: col. 5, lines 23-39).

Regarding claim 13, the remote control system according to claim 11, further comprising: an information setting unit configured to set said apparatus information in advance of retrieving said status information, for which said retrieval by said information retrieval unit is allowed (Sawada: col. 4, lines 33-36).

Regarding claim 14, the remote control system according to claim 11, wherein said information which is acquired from said plurality of apparatuses and being retrieved by said information retrieval unit is related to pre-maintenance (Sawada: col. 4, lines 30-48).

Regarding claim 15, the remote control system according to claim 11, wherein said information accumulated, from all of said plurality of apparatuses to be remotely controlled, by said information accumulation unit is related to expendable supplies and material (Sawada: col. 4, lines 30-45).

Regarding claim 16, the remote control system according to claim 11, further comprising: a group setting unit configured to set a group in advance of retrieving said status information by dividing said plurality of image forming apparatuses into said predetermined number of groups (Sawada: col. 16, lines 34-40).

Regarding claim 17, the remote control system according to claim 16, further comprising: a plurality of communication adapters connected to said plurality of image forming apparatuses for communicating with said central control system, wherein said group setting unit divides said plurality of image forming apparatuses into a number of groups each assigned to said communication adapters (Sawada: col. 16, lines 34-40).

Regarding claim 18, the remote control system according to claim 16, further comprising: a plurality of communication adapters connected to said plurality of image forming apparatuses for communicating with said central control system, wherein said group setting unit divides said plurality of image forming apparatuses into a number of groups each assigned to a predetermined number of said respective communication adapters (Sawada: col. 16, lines 34-40).

Regarding claim 19, the remote control system according to claim 16, wherein said plurality of image forming apparatuses are interconnected by way of communication networks incorporating a network control unit, and wherein said group setting unit divides said plurality of image forming apparatuses into a number of groups each assigned to an IP address in said network system (Sawada: col. 16, lines 34-40).

Regarding claim 20, the remote control system according to claim 16, wherein said plurality of image forming apparatuses are interconnected by way of communication networks incorporating a network control unit, and wherein said group setting unit divides said plurality of image forming apparatuses into a number of groups each assigned to a predetermined number of IP addresses in said network system (Sawada: col. 16, lines 34-40).

Regarding claim 21, the remote control system according to claim 12, further comprising: an information alteration and addition unit configured to perform alteration and addition onto said information processed by said information processing unit (Sawada: col. 5, lines 28-45; col. 6, lines 42-55).

Regarding claim 22, the remote control system according to claim 12, further comprising: an information destination unit configured to set a destination of information transmission performed by said information transmission unit (Sawada: col. 15, lines 58-64; col. 5, lines 33-39).

Regarding claim 23, the remote control system according to claim 12, further comprising: an information outputting unit configured to output said information processed by said information processing unit through at least one of an image formation on a display device, data recording on a paper sheet, or an audible voice (Sawada: col. 5, lines 15-26).

Regarding claim 24, the remote control system according to claim 12, further comprising: an information transmitting unit configured to transmit said information processed by said information processing unit when a request for acquiring said processed information is received from any terminal unit of the terminal units (Sawada: col. 5, lines 33-39).

Regarding claim 25, a remote control system configured to control a plurality of apparatuses divided into a predetermined number of groups including at least an image forming apparatus (Sawada: col. 5, lines 5-22; claim 1), comprising:

a central control system comprising at least a computer unit configured to receive status information from said plurality of apparatuses and remotely control said plurality of apparatuses based on said status information (Sawada: col. 5, lines 5-22);

an information collection unit configured to collect the status information from other image forming apparatuses included in a same group as said at least an image forming apparatus

when apparatus information of said at least an image forming apparatus is received by said central control system (Sawada: col. 5, lines 5-22);

a first information processing unit configured to process said apparatus information (Sawada: col. 5, lines 5-22);

a first information transmission unit configured to connect to terminal units provided by a plurality of service centers so as to control said plurality of image forming apparatuses, and subsequently transmitting said apparatus information processed by said first information processing unit (Sawada: col. 5, lines 23-39);

an information accumulation unit configured to accumulate said apparatus information when said apparatus information is received from said at least an image forming apparatus of said plurality of apparatuses to be remotely controlled (Sawada: col. 5, lines 5-22);

an information retrieval unit configured to retrieve said status information from other image forming apparatuses included in a same group as said at least an image forming apparatus (Sawada: col. 5, lines 5-22) when said apparatus information of said at least an image forming apparatus is received by said central control system (Sawada: col. 3, lines 1-11);

a second information processing unit configured to process said apparatus information received from said at least an image forming apparatus of said plurality of apparatuses and retrieved by said information retrieval unit (Sawada: col. 5, lines 5-22);

a second information transmission unit configured to connect to the terminal units so as to control said plurality of image forming apparatuses, and subsequently transmitting said apparatus information processed by said second information processing unit (Sawada: col. 5, lines 23-39); and

an information decision unit configured to determine whether or not an execution command is sent to any one of said information collection unit, said first information processing unit, said first information transmission unit, said information retrieval unit, said second information processing unit, and said second information transmission unit (Sawada: col. 4, lines 30-44).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-41, 43-100, 102-109 are rejected under 35 U.S.C. 103(a) as being unpatentable by U.S. Patent No 6,343,320 by Fairchild et al in view of U.S. Patent No 6,310,692 by Fan et al.

Regarding claim 1, a remote control system configured to control a plurality of apparatuses divided into a predetermined number of groups including at least an image forming apparatus (Fairchild: col. 11, lines 3-30; col. 6, lines 62-67), comprising:

a central control system comprising at least a computer unit configured to receive status information from said plurality of apparatuses and remotely control said plurality of apparatuses based on said status information (Fairchild: col. 2, lines 30-43; each device receives information from other devices); and

an information collection unit configured to collect the status information from other image forming apparatuses included in a same group as said at least an image forming apparatus when apparatus information of said at least an image forming apparatus is received by said central control system (Fairchild: col. 2, lines 30-52; col. 3, lines 45-57; col. 6, lines 11-45).

The Fairchild reference teaches an apparatus for forming content to be browsed but does not explicitly state an image forming apparatus.

The Fan reference teaches a remote control system for controlling image forming apparatuses (Fan: col. 3, lines 64- col. 4, lines 34)

The Fan reference further teaches the reference allows remote monitoring and control of devices to alert personnel of preventive maintenance needs to reduce down-time and improve efficiency of repair (Fan: col. 3, lines 1-26).

Therefore it would have been obvious at the time of the invention to one of ordinary skill in the art to create the system of remote control as taught by Fairchild while employing image forming apparatuses as taught by Fan in order to use preventive maintenance to reduce down-time and improve efficiency or repair (Fan: col. 3, lines 1-26).

Claims 2-10 are rejected under the same rationale given above. In the rejections set fourth, the examiner will address the additional limitations and point to the relevant teaches of Fairchild and Fan.

Regarding claim 2, the remote control system according to claim 1, further comprising:

an information processing unit configured to process said status information which is acquired from said plurality of apparatuses and is collected by said information collection unit (Fairchild: col. 6, lines 25-45; Fan: 4, lines 49- col. 5, line 26); and

an information transmission unit configured to connect to terminal units provided by a plurality of service centers so as to control said plurality of image forming apparatuses and subsequently transmitting said information processed by said information processing unit (Fairchild: col. 6, lines 46- col. 7, line 4; Fan: 4, lines 49- col. 5, line 26).

Regarding claim 3, the remote control system according to claim 1, further comprising:

an information setting unit configured to set said apparatus information in advance of collecting said status information, for which said collection by said information collection unit is allowed (Fairchild: col. 6, lines 11-40).

Regarding claim 4, the remote control system according to claim 1, wherein said information collected, from all of said plurality of apparatuses to be remotely controlled, by said information collection unit is related to pre-maintenance (Fairchild: col. 6, lines 38-45; col. 7, lines 41-63; Fan: col. 6, lines 9-35).

Regarding claim 5, the remote control system according to claim 1, wherein said information collected, from all of said plurality of apparatuses to be remotely controlled, by said information

collection unit is related to expendable supplies and material (Fan: col. 5, lines 26-59; col. 1, lines 14-44).

Regarding claim 6, the remote control system according to claim 1, further comprising:

a group setting unit configured to set a group in advance of collecting said status information by dividing said plurality of image forming apparatuses into said predetermined number of groups (Fairchild: col. 11, lines 3-55).

Regarding claim 7, the remote control system according to claim 2, further comprising: an information alteration and addition unit configured to perform alteration and addition onto said information processed by said information processing unit (Fairchild: col. 9, lines 36-48).

Regarding claim 8, the remote control system according to claim 2, further comprising: an information destination setting unit configured to set a destination of information transmission performed by said information transmission unit (Fairchild: col. 11, lines 56- col. 12, line 3).

Regarding claim 9, the remote control system according to claim 2, further comprising: an information outputting unit configured to output said information processed by said information processing unit through at least one of an image formation on a display device, data recording on a paper sheet, or an audible voice (Fairchild: col. 5, lines 1-26; col. 6, lines 38- col. 7, line 4).

Regarding claim 10, the remote control system according to claim 2, further comprising: an information transmitting unit configured to transmit said information processed by said information processing unit when a request for acquiring said processed information is received from any terminal unit of the terminal units (Fairchild: col. 14, lines 66- col. 15, lines 34).

Regarding claim 11, a remote control system configured to control a plurality of apparatuses divided into a predetermined number of groups including at least an image forming apparatus (Fairchild: col. 11, lines 3-30; col. 6, lines 62-67), comprising:

a central control system comprising at least a computer unit configured to receive status information from said plurality of apparatuses and remotely control said plurality of apparatuses based on said status information of at least an image forming apparatus (Fairchild: col. 2, lines 30-43; each device receives information from other devices);

an information accumulation unit configured to accumulate apparatus information when said apparatus information is received by said central control system from said at least an image forming apparatus of said plurality of apparatuses to be remotely controlled (Fairchild: col. 6, lines 11-40; col. 2, lines 30-43; each device receives information from other devices); and

an information retrieval unit configured to retrieve the status information from other image forming apparatuses included in a same group as said at least an image forming apparatus when said apparatus information of said at least an image forming apparatus is received by said central control system (Fairchild: col. 2, lines 30-52; col. 3, lines 45-57; col. 6, lines 11-45).

The Fairchild reference teaches an apparatus for forming content to be browsed but does not explicitly state an image forming apparatus.

The Fan reference teaches a remote control system for controlling image forming apparatuses (Fan: col. 3, lines 64- col. 4, lines 34)

The Fan reference further teaches the reference allows remote monitoring and control of devices to alert personnel of preventive maintenance needs to reduce down-time and improve efficiency of repair (Fan: col. 3, lines 1-26).

Therefore it would have been obvious at the time of the invention to one of ordinary skill in the art to create the system of remote control as taught by Fairchild while employing image forming apparatuses as taught by Fan in order to use preventive maintenance to reduce down-time and improve efficiency or repair (Fan: col. 3, lines 1-26).

Claims 12-24 are rejected under the same rationale given above. In the rejections set fourth, the examiner will address the additional limitations and point to the relevant teaches of Fairchild and Fan.

Regarding claim 12, the remote control system according to claim 11, further comprising:

an information processing unit configured to process said status information which is acquired from said plurality of apparatuses and is retrieved by said information retrieval unit (Fairchild: col. 6, lines 25-45; Fan: 4, lines 49- col. 5, line 26); and

an information transmission unit configured to connect to terminal units provided by a plurality of service centers so as to control said plurality of image forming apparatuses, and subsequently transmitting said information processed by said information processing unit (Fairchild: col. 6, lines 46- col. 7, line 4).

Regarding claim 13, the remote control system according to claim 11, further comprising: an information setting unit configured to set said apparatus information in advance of retrieving said status information, for which said retrieval by said information retrieval unit is allowed (Fairchild: col. 6, lines 11-40).

Regarding claim 14, the remote control system according to claim 11, wherein said information which is acquired from said plurality of apparatuses and being retrieved by said information retrieval unit is related to pre-maintenance (Fairchild: col. 6, lines 38-45; col. 7, lines 41-63; Fan: col. 6, lines 9-35).

Regarding claim 15, the remote control system according to claim 11, wherein said information accumulated, from all of said plurality of apparatuses to be remotely controlled, by said information accumulation unit is related to expendable supplies and material (Fan: col. 5, lines 26-59; col. 1, lines 14-44).

Regarding claim 16, the remote control system according to claim 11, further comprising: a group setting unit configured to set a group in advance of retrieving said status information by dividing said plurality of image forming apparatuses into said predetermined number of groups (Fairchild: col. 11, lines 3-55).

Regarding claim 17, the remote control system according to claim 16, further comprising: a plurality of communication adapters connected to said plurality of image forming apparatuses for

communicating with said central control system, wherein said group setting unit divides said plurality of image forming apparatuses into a number of groups each assigned to said communication adapters (Fairchild: col. 11, lines 3-30).

Regarding claim 18, the remote control system according to claim 16, further comprising: a plurality of communication adapters connected to said plurality of image forming apparatuses for communicating with said central control system, wherein said group setting unit divides said plurality of image forming apparatuses into a number of groups each assigned to a predetermined number of said respective communication adapters (Fairchild: col. 11, lines 3-30).

Regarding claim 19, the remote control system according to claim 16, wherein said plurality of image forming apparatuses are interconnected by way of communication networks incorporating a network control unit, and wherein said group setting unit divides said plurality of image forming apparatuses into a number of groups each assigned to an IP address in said network system (Fairchild: col. 11, lines 3-30).

Regarding claim 20, the remote control system according to claim 16, wherein said plurality of image forming apparatuses are interconnected by way of communication networks incorporating a network control unit, and wherein said group setting unit divides said plurality of image forming apparatuses into a number of groups each assigned to a predetermined number of IP addresses in said network system (Fairchild: col. 11, lines 3-30).

Regarding claim 21, the remote control system according to claim 12, further comprising: an information alteration and addition unit configured to perform alteration and addition onto said information processed by said information processing unit (Fairchild: col. 9, lines 36-48).

Regarding claim 22, the remote control system according to claim 12, further comprising: an information destination unit configured to set a destination of information transmission performed by said information transmission unit (Fairchild: col. 11, lines 56- col. 12, line 3).

Regarding claim 23, the remote control system according to claim 12, further comprising: an information outputting unit configured to output said information processed by said information processing unit through at least one of an image formation on a display device, data recording on a paper sheet, or an audible voice (Fairchild: col. 5, lines 1-26; col. 6, lines 38- col. 7, line 4).

Regarding claim 24, the remote control system according to claim 12, further comprising: an information transmitting unit configured to transmit said information processed by said information processing unit when a request for acquiring said processed information is received from any terminal unit of the terminal units (Fairchild: col. 14, lines 66- col. 15, lines 34).

Regarding claim 25, a remote control system configured to control a plurality of apparatuses divided into a predetermined number of groups including at least an image forming apparatus (Fairchild: col. 11, lines 3-30; col. 6, lines 62-67), comprising:

a central control system comprising at least a computer unit configured to receive status information from said plurality of apparatuses and remotely control said plurality of apparatuses based on said status information (Fairchild: col. 2, lines 30-43; each device receives information from other devices);

an information collection unit configured to collect the status information from other image forming apparatuses included in a same group as said at least an image forming apparatus when apparatus information of said at least an image forming apparatus is received by said central control system (Fairchild: col. 2, lines 30-43; each device receives information from other devices);

a first information processing unit configured to process said apparatus information (Fairchild: col. 2, lines 30-43; each device receives information from other devices);

a first information transmission unit configured to connect to terminal units provided by a plurality of service centers so as to control said plurality of image forming apparatuses, and subsequently transmitting said apparatus information processed by said first information processing unit (Fairchild: col. 2, lines 30-52; col. 3, lines 45-57; col. 6, lines 11-45);

an information accumulation unit configured to accumulate said apparatus information when said apparatus information is received from said at least an image forming apparatus of said plurality of apparatuses to be remotely controlled (Fairchild: col. 2, lines 30-43; each device receives information from other devices);

an information retrieval unit configured to retrieve said status information from other image forming apparatuses included in a same group as said at least an image forming apparatus when said apparatus information of said at least an image forming apparatus is received by said central control system (Fairchild: col. 2, lines 30-52; col. 3, lines 45-57; col. 6, lines 11-45);

a second information processing unit configured to process said apparatus information received from said at least an image forming apparatus of said plurality of apparatuses and retrieved by said information retrieval unit (Fairchild: col. 6, lines 11-40);

a second information transmission unit configured to connect to the terminal units so as to control said plurality of image forming apparatuses, and subsequently transmitting said apparatus information processed by said second information processing unit (Fairchild: col. 6, lines 25-45); and

an information decision unit configured to determine whether or not an execution command is sent to any one of said information collection unit, said first information processing unit, said first information transmission unit, said information retrieval unit, said second information processing unit, and said second information transmission unit (Fairchild: col. 5, lines 52- col. 6, line 37).

The Fairchild reference teaches an apparatus for forming content to be browsed but does not explicitly state an image forming apparatus.

The Fan reference teaches a remote control system for controlling image forming apparatuses (Fan: col. 3, lines 64- col. 4, lines 34)

The Fan reference further teaches the reference allows remote monitoring and control of devices to alert personnel of preventive maintenance needs to reduce down-time and improve efficiency of repair (Fan: col. 3, lines 1-26).

Therefore it would have been obvious at the time of the invention to one of ordinary skill in the art to create the system of remote control as taught by Fairchild while employing image

forming apparatuses as taught by Fan in order to use preventive maintenance to reduce down-time and improve efficiency or repair (Fan: col. 3, lines 1-26).

In the computer network art a the differences between a system, method, a computer accessible recording medium tangibly embodying a program of instructions, and means functions for remote and central control; are equated to the software, hardware, and actions in which the invention runs. Because the claims are substantially similar in content across claim trees, the examiner has grouped the claims across as illustrated below and rejected all the limitations.

Claims 1-41, 43-100, 102-109 are rejected under 35 U.S.C. 103(a) as being unpatentable by U.S. Patent No 6,343,320 by Fairchild et al in view of U.S. Patent No 6,310,692 by Fan et al.

PRIOR ART

U.S. Patent No. 5,913,090 by Sawada et al and

U.S. Patent No. 5,825,816 by Sawada et al teaches similar features to the above claimed and rejected. The references have the same assignee but different inventive entity.

REMARKS

The claim language has minor amendments from the previous prior art but is still very broad because many terms are not defined within the claims.

The Applicant Argues:

The Fairchild and Fan reference do not teach the limitations of the claim invention, in particular, "collecting the status information from other image forming apparatuses included in a same group as said at least an image forming apparatus when apparatus information of said at least an image forming apparatus is received by said central control system.

In response, the examiner respectfully submits:

The Fairchild and Fan references do teach the claimed limitation.

The Fairchild reference teaches the NPDs store the information and periodically sends its status information to the management server, which collects and saves information in a database. The management server manages devices, performance and device status and device group. Col. 6, lines 11-15. Applicant argues that the data is collected when triggered by apparatus information is received from the specific image forming apparatus. The examiner is not

persuaded. Applicant argues triggering but the term trigger is not in the claim limitation or in the specification. Triggering is a narrow view of the claim language. The examiner reads it as stated. A collection unit collects status information from other image forming apparatuses in the group when apparatus information of an image forming apparatus is received. The Fairchild does show an example of triggered sending of data in col. 2, lines 44-54. The forward logic, if the device determines it is master, forwards the status information either periodically or if there is a change in the local and external status information or a combination of both. If there is a change, the management server will need to be apprised of the status of the devices on the subnet. This is a trigger. Fairchild: col. 2, lines 30-52; col. 3, lines 45-57; col. 6, lines 11-45 teaches the information is triggered when a change occurs.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Benjamin R. Bruckart whose telephone number is (571) 272-3982. The examiner can normally be reached on 8:00-5:30PM with every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar can be reached on (571) 272-4006. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Patrice Winder
PATRICE WINDER
PRIMARY EXAMINER